

WHAT IS CLAIMED IS:

1. A ladder assembly for a cargo vehicle having a cargo space wherein articles can be positioned for transport, the ladder assembly comprising:

a mounting structure that attaches to an interior surface of the cargo space of the vehicle;

a ladder having a pair of side members and a plurality of rungs extending therebetween;

an attachment assembly interconnecting the ladder to the mounting structure, wherein the attachment assembly allows for movement of the ladder from a storage configuration wherein the ladder assembly is secured to the interior surface of the cargo space of the vehicle to a deployed configuration wherein the ladder is rotated out of the plane of the interior surface and pivoted so as to be extended from the interior surface of the cargo space of the vehicle to the ground so as to allow an individual access to the cargo space of the vehicle from the ground by climbing the ladder wherein the attachment assembly includes a pivot member so as to allow the ladder to pivot in the deployed configuration about an axis to thereby allow the side members of the ladder to be positioned in contact with the ground when the ground is not parallel to the interior surface.

2. The assembly of Claim 1, wherein the mounting structure is adapted to be mounted to an inner surface of a tailgate assembly of a pickup truck such that, in the storage configuration, the ladder is secured to the tailgate when the tailgate is in a closed position.

3. The assembly of Claim 2, wherein the mounting structure secures the ladder to the tailgate such that the ladder is suspended from the tailgate to thereby remove the ladder from the floor of the bed of the pickup truck to increase the amount of available space within the bed of the pickup for cargo.

4. The assembly of Claim 3, wherein the securing structure comprises a pair of parallel mounting members that mount to the tailgate and define a recess between the tailgate and the mounting member such that a portion of the ladder can be positioned within the recess so as to suspend the ladder from the mounting members.

5. The assembly of Claim 1, wherein the attachment assembly includes a first pivot structure that has an pivot axis perpendicular to the interior surface of the cargo space so as to allow the ladder to rotate in the plane of the interior surface of the cargo space so as to be positioned outward of the interior surface.

6. The assembly of Claim 5, wherein the mounting structure engages with the ladder when the ladder is positioned outward of the interior surface so as to limit the rotational movement of the ladder about the first pivot axis.

7. The assembly of Claim 5, wherein the attachment assembly includes a second pivot structure that allows the ladder to pivot so as to allow the ladder to extend from the interior surface of the cargo space to the ground.

8. The assembly of Claim 6, wherein the attachment assembly includes a third pivot structure that allows the ladder to pivot about a third axis when extending from the interior surface to the ground.

9. The assembly of Claim 1, wherein the side members of the ladder assembly are coupled to the attachment assembly in a manner that allows the ladder to be extended outward from the interior surface in the deployed configuration.

10. The assembly of Claim 9, wherein the attachment assembly includes a securing member that couples the side members of the ladder to the attachment assembly and a plurality of mounting locations that engage the securing member so as to allow the securing member to be attached to the mounting locations in one of a plurality of different mounting orientations.

11. The assembly of Claim 10, wherein the securing member attached to the attachment assemblies and the mounting locations comprise a plurality of holes formed in the side members of the ladder such that the ladder can be detachably engaged to the attachment assembly in one of a plurality of different locations and wherein the securing member defines a pivot point for the ladder with respect to the attachment assembly.

12. A ladder assembly for a pickup truck having a tailgate comprising:

a mounting structure attached to the interior surface of the tailgate of the pickup truck;

a ladder having two side members and a plurality of rungs extending therebetween;

an attachment assembly interconnecting the ladder to the mounting structure, wherein the mounting structure retains the ladder in a storage configuration against the tailgate when the tailgate is in the closed position such that the side members of the ladder extend parallel to the length of the tailgate in the storage configuration and wherein the attachment assembly permits the ladder to be rotated out of the plane of the tailgate and then pivoted downward to the ground in a deployed configuration when the tailgate is opened.

13. The assembly of Claim 12, wherein the mounting structure secures the ladder to the tailgate such that the ladder is suspended from the tailgate to thereby remove the ladder from the floor of the bed of the pickup truck to increase the amount of available space within the bed of the pickup for cargo.

14. The assembly of Claim 13, wherein the securing structure comprises a pair of parallel mounting members that mount to the tailgate and define a recess between the tailgate and the mounting member such that a portion of the ladder can be positioned within the recess so as to suspend the ladder from the mounting members.

15. The assembly of Claim 12, wherein the attachment assembly includes a first pivot structure that has an pivot axis perpendicular to the interior surface of the cargo space so as to allow the ladder to rotate in the plane of the interior surface of the cargo space so as to be positioned outward of the interior surface.

16. The assembly of Claim 15, wherein the mounting structure engages with the ladder when the ladder is positioned outward of the interior surface so as to limit the rotational movement of the ladder about the first pivot axis.

17. The assembly of Claim 15, wherein the attachment assembly includes a second pivot structure that allows the ladder to pivot so as to allow the ladder to extend from the interior surface of the cargo space to the ground.

18. The assembly of Claim 17, wherein the attachment assembly includes a third pivot structure that allows the ladder to pivot about a third axis when extending from the interior surface to the ground.

19. The assembly of Claim 12, wherein the side members of the ladder assembly are coupled to the attachment assembly in a manner that allows the ladder to be extended outward from the interior surface in the deployed configuration.

20. The assembly of Claim 19, wherein the attachment assembly includes a securing member that couples the side members of the ladder to the attachment assembly and a plurality of mounting locations that engage the securing member so as to allow the securing member to be attached to the mounting locations in one of a plurality of different mounting orientations.

21. The assembly of Claim 20, wherein the securing member attached to the attachment assemblies and the mounting locations comprise a plurality of holes formed in the side members of the ladder such that the ladder can be detachably engaged to the attachment assembly in one of a plurality of different locations and wherein the securing member defines a pivot point for the ladder with respect to the attachment assembly.

22. A ladder assembly for attachment to a tailgate of a vehicle, comprising:
a ladder having two side rails and a plurality of steps extending therebetween;
a mounting structure coupled to the ladder, the mounting structure being attached to the tailgate and the ladder so as to secure the ladder to the tailgate in a storage configuration such that the ladder extends across an interior surface of the tailgate, the mounting structure further comprising a first pivot that allows the ladder to be deployed in a deployed orientation so as to extend from the tailgate to the ground and a second pivot that allows the ladder to be pivoted sideways when the ladder is in the deployed configuration.

23. The assembly of Claim 22, wherein the mounting structure secures the ladder to the tailgate such that the ladder is suspended from the tailgate to thereby remove the ladder from the floor of the bed of the pickup truck to increase the amount of available space within the bed of the pickup for cargo.

24. The assembly of Claim 23, wherein the mounting structure comprises a pair of parallel mounting members that mount to the tailgate and define a recess between the tailgate and the mounting member such that a portion of the ladder can be positioned within the recess so as to suspend the ladder from the mounting members.

25. The assembly of Claim 24, wherein the mounting structure further comprises an locking member that can be locked so as to secure the ladder in the storage configuration.

26. The assembly of Claim 22, wherein the mounting structure includes a first pivot structure that has an pivot axis perpendicular to the interior surface of the cargo space so as to allow the ladder to rotate in the plane of the interior surface of the cargo space so as to be positioned outward of the interior surface.

27. The assembly of Claim 26, wherein the mounting structure engages with the ladder when the ladder is positioned outward of the interior surface so as to limit the rotational movement of the ladder about the first pivot axis.

28. The assembly of Claim 26, wherein the mounting structure includes a second pivot structure that allows the ladder to pivot so as to allow the ladder to extend from the interior surface of the cargo space to the ground.

29. The assembly of Claim 28, wherein the mounting structure includes a third pivot structure that allows the ladder to pivot about a third axis when extending from the interior surface to the ground such that the two side members of the ladder can contact the ground when the ground is not parallel to the tailgate.

30. The assembly of Claim 22, wherein the side members of the ladder are coupled to the mounting structure in a manner that allows the ladder to be extended outward from the tailgate in the deployed configuration.

31. The assembly of Claim 30, wherein the mounting structure includes a securing member that couples the side members of the ladder to the mounting structure and a plurality of mounting locations that engage the securing member so as to allow the securing member to be attached to the mounting locations in one of a plurality of different mounting orientations.

32. The assembly of Claim 31, wherein the securing member is attached to the mounting structure and the mounting locations comprise a plurality of holes formed in the side members of the ladder such that the ladder can be detachably engaged to the mounting structure in one of a plurality of different locations and wherein the securing member defines a pivot point for the ladder with respect to the mounting structure.

33. A ladder assembly for attachment to a tailgate of a vehicle, comprising:

a ladder having at least two support legs and a plurality of step components extending therebetween;

a mounting bracket that attaches to a mounting surface on the tailgate of the vehicle and secured to said ladder thereto;

a pivot armature having a first end and a second end, said first end is connected to the mounting bracket at a first pivot such that the armature is rotatable about the first pivot with respect to a plane parallel to the mounting surface; and

a yoke connected to the second end of the pivot armature at a second pivot such that the yoke is rotatable about the second pivot in a plane substantially perpendicular to the mounting surface, wherein the opposing ends of the yoke are each connected to a respective support leg of the ladder at a fourth and fifth pivot such that the support legs are rotatable about the third and fourth pivots with respect to a plane substantially perpendicular to the mounting surface.